

CLAIMS

We claim:

1. A method of allocating call processing resources comprising:

receiving at a base transceiver station a signal sent wirelessly from a client
5 station;

selecting one of multiple base station controllers to which to route the signal from
the base transceiver station; and

routing the signal from the base transceiver station to the selected base station
controller.

2. The method of claim 1, wherein selecting one base station controller to
which to route the signal comprises selecting the one base station controller based at least
in part on a current time and/or day and/or date.

3. The method of claim 1, wherein selecting the one base station controller to
which to route the signal comprises:

detecting that the signal originated from a particular client station; and

selecting the one base station controller based at least in part on the signal having
originated from the particular client station.

4. The method of claim 1, further comprising:

detecting particular content of the signal; and

responsively selecting one controller based at least in part on the particular content of the signal.

5 5. The method of claim 4, wherein the particular content comprises dialed digits.

6. The method of claim 4, wherein the particular content comprises an identification of the client station.

10 7. The method of claim 1, wherein routing the signal from the base transceiver station to the selected base station controller comprises:

 sending the signal into a packet-switched network for transmission over the packet-switched network to the selected base station controller.

15 8. The method of claim 1, wherein routing the signal from the base transceiver station to the selected base station controller comprises:

 sending the signal over a direct link between the base transceiver station and the selected base station controller.

20 9. A method comprising:

 receiving at a base transceiver station a first signal sent wirelessly from a client station;

selecting a first one of multiple base station controllers to which to route the first signal from the base transceiver station, and routing the first signal over a packet-switched network from the base transceiver station to the first selected base station controller;

5 receiving at the base transceiver station a second signal sent wirelessly from a client station; and

 selecting a second one of multiple base station controllers to which to route the second signal from the base transceiver station, and routing the second signal over the packet-switched network from the base transceiver station to the second selected base station controller.

10

10. A base transceiver station comprising:

 an antenna system configured to wirelessly receive signals from client stations; and

15 control logic tied locally to the antenna system, wherein the antenna system passes to the control logic the signals that the antenna system receives wirelessly from client stations, and wherein the control logic in turn passes the signals to a remote base station controller,

 wherein the control logic is arranged to select one of multiple remote base station controllers to which to route a given signal received by the antenna system, and to then route the given signal to the selected remote base station controller.

20

11. The base transceiver station of claim 10, wherein the control logic comprises a processor, data storage, and machine language instructions stored in the data storage and executable by the processor to select the one remote base station.

5

12. The base transceiver station of claim 10, wherein the control logic selects the one remote base station controller based at least in part on a time and/or day and/or date when the control logic receives the given signal.

10

13. The base transceiver station of claim 10, wherein the control logic selects the one remote base station controller by a process comprising:

detecting that the given signal originated from a particular client station; and

selecting the one base station controller based at least in part on the signal having originated from the particular client station.

15

14. The base transceiver station of claim 10, wherein the control logic selects the one remote base station controller by a process comprising:

detecting particular content of the signal; and

responsively selecting one controller based at least in part on the particular content of the signal.

20

15. The base transceiver station of claim 14, wherein the particular content comprises dialed digits.

16. The base transceiver station of claim 14, wherein the particular content comprises an identification of the client station.

5 17. The base transceiver station of claim 10, wherein the control logic routes the given signal to the selected one remote base station controller by sending the signal into a packet-switched network for transmission over the packet-switched network to the selected one remote base station controller.

10 18. The base transceiver station of claim 10, wherein the control logic routes the given signal to the selected one remote base station controller by sending the signal over a direct link between the base transceiver station and the selected base station controller.

15 19. A base transceiver station comprising:
an antenna system configured to wirelessly receive signals from client stations;
and
control logic tied locally to the antenna system, wherein the antenna system passes to the control logic the signals that the antenna system receives wirelessly from
20 client stations, and wherein the control logic in turn passes the signals to a remote base station controller,

wherein the control logic selects a first one of multiple remote base station controllers to which to route a first signal received by the antenna system, and the control logic then routes the first signal to the selected first remote base station controller, and

5 wherein the control logic selects a second one of the multiple remote base station controllers to which to route a second signal received by the antenna system, and the control logic then routes the second signal to the selected second remote base station controller.